

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A transgenic plant comprising in its genome a transgene comprising a sense or antisense FPA polynucleotide sequence which causes the plant to have an altered flowering time as compared to non-transgenic plants of the same species, the FPA polynucleotide having a coding region which has at least 50% sequence identity to SEQ ID NO:2.
2. (previously presented) The transgenic plant of claim 1, wherein the transgenic plant flowers earlier than non-transgenic plants of the same species.
3. (previously presented) The transgenic plant of claim 1, wherein the transgenic plant flowers later than non-transgenic plants of the same species.
4. (previously presented) The transgenic plant of claim 1, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.
5. (currently amended) The transgenic plant of claim 1, wherein the FPA polynucleotide sequence is ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.~~
6. (currently amended) Seed of the transgenic plant of claim 1 which carries the transgene in its genome.
7. (currently amended) A plant grown from the seed of claim 6 which carries the transgene in its genome.

8. (currently amended) A plant comprising in its genome a genetic construct comprising a sense or antisense FPA polynucleotide sequence, wherein the expression of the sequence in the plant causes alteration in the flowering timing of the plant as compared to non-transgenic plants of the same species, the FPA polynucleotide having a coding region which has at least 50% sequence identity to SEQ ID NO:2.

9. (previously presented) The plant of Claim 8, wherein the genetic construct further comprises a promoter, not natively associated with the FPA polynucleotide sequence, which promotes the expression of the FPA polynucleotide sequence in the plant.

10. (previously presented) The plant of claim 8, wherein the transgenic plant flowers earlier than non-transgenic plants of the same species.

11. (previously presented) The plant of claim 8, wherein the transgenic plant flowers later than non-transgenic plants of the same species.

12. (previously presented) The plant of claim 8, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.

13. (currently amended) The plant of claim 8, wherein the FPA polynucleotide sequence is ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.~~

14. (currently amended) A seed of the plant of claim 8 which carries the genetic construction in its genome.

15. (currently amended) A plant grown from the seed of claim 14 which carries the genetic construction in its genome.

16. (currently amended) A plant seed comprising in its genome a genetic construct comprising a sense or antisense FPA polynucleotide sequence and a plant expressible promoter, which promotes expression of the FPA polynucleotide sequence in the plant, the FPA polynucleotide having a coding region which has at least 50% sequence identity to SEQ ID NO:2, and wherein expression of the sequence in the plant causes alteration of the flowering timing of the plant as compared to non-transgenic plants of the same species.

17. (previously presented) The seed of claim 16, wherein the transgenic plant flowers earlier than non-transgenic plants of the same species.

18. (previously presented) The seed of claim 16, wherein the transgenic plant flowers later than non-transgenic plants of the same species.

19. (previously presented) The seed of claim 16, wherein the FPA polynucleotide sequence is from *Arabidopsis thaliana*.

20. (currently amended) The seed of claim 16, wherein FPA polynucleotide sequence is ~~selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.~~

21. (previously presented) A transgenic plant cultivated from the seed of claim 16.

22. (currently amended) An isolated DNA sequence comprising the coding sequence for the FPA gene from *Arabidopsis thaliana*, the FPA polynucleotide having a coding region which has at least 80% sequence identity to SEQ ID NO:2.

23. (currently amended) The DNA sequence of Claim 22, wherein the sequence is ~~selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.~~

23-24. (currently amended) An isolated DNA sequence comprising a DNA sequence encoding the FPA protein from *Arabidopsis thaliana*, the protein having at least 80% sequence identity to SEQ ID NO:3.

24-25. (currently amended) The DNA sequence of Claim ~~23~~24, wherein the sequence is ~~selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2~~

~~25-26.~~ (currently amended) A method of producing a transgenic plant with altered flowering characteristics comprising the steps of constructing a genetic construct comprising a plant expressible promoter and an FPA polynucleotide sequence, the FPA polynucleotide having a coding region which has at least 50% sequence identity to SEQ ID NO:2, introducing the genetic construct into a plant cell, selecting a plant that has received a copy of the genetic construct, and growing the plant under conditions that allow expression of the FPA gene.

26-27. (withdrawn) A method of altering FLC mRNA activity in a plant comprising the steps of constructing a genetic construct comprising a plant expressible promoter and an FPA polynucleotide sequence, introducing the genetic construct into a plant cell, selecting a plant that has received a copy of the genetic construct, and growing the plant under conditions that allow expression of the FPA gene.